1845MNRAS...7...20S

The author has arranged in a table the places of the comet deduced from all the above observations, excepting the Madras, which he had not been able to procure; and he specifies the name of the observer and the place of observation for each result, as well as the authority from which it has been obtained. He gives also a table containing five sets of elements, two of which were computed by himself, and the remaining three by Messrs. Waterston, Taylor, and Caldecott.

IV. Sextant Observations of the Great Comet of 1844–5, made at Colombo, near Ceylon, by W. H. Simms, Esq. Communicated by W. Simms, Esq.

The times given are corrected for error of watch, and the observed distances for index-error.

The following are the observed distances:—

1845, Jan. 5; bar. $30^{\text{in}}{\cdot}10$; therm. 82°.

For Colombo Mean Time.

	h	m			°	′	″
At	6	59	Distance from	α Eridani......	33	46	45
	7	5	...	Fomalhaut ...	16	42	4
	7	15	...	α Eridani......	33	43	59
	7	23	...	Fomalhaut ...	16	41	55
	7	33	...	Sirius	102	34	10

Jan. 6; bar. $30^{\text{in}}{\cdot}06$; therm. 84°.

At	6	57	Distance from	Fomalhaut ...	15	34	0
	7	1	...	α Eridani......	32	5	0
	7	3	...	Fomalhaut ...	15	33	20
	7	6	...	α Eridani......	32	5	0
	7	12	...	α Arietis	84	1	0
	7	18	...	Rigel	92	35	30

Jan. 7; bar. $30^{\text{in}}{\cdot}04$; therm. 84°.

At	7	0	Distance from	Fomalhaut ...	14	40	59
	7	1	...	α Eridani......	30	31	30
	7	3	...	β Ceti	36	37	15
	7	7	...	Fomalhaut ...	14	37	45
	7	9	...	Fomalhaut ...	14	39	40
	7	15	...	α Eridani......	30	30	35
	7	17	...	Fomalhaut ...	14	39	30
	7	20	...	β Ceti	36	36	10
	7	24	...	α Eridani......	30	30	58
	7	27	...	α Arietis	82	16	53
	7	32	...	Rigel	90	26	10

The comet was ill defined this evening, rendering the comparisons with Fomalhaut and α Eridani very distressing.

Jan. 8; bar. $29^{\text{in}}{\cdot}97$; therm. 83°.

For Colombo Mean Time.

	h	m			°	′	″
At	6	59	Distance from	Fomalhaut ...	14	4	23
	7	3	...	α Eridani......	29	5	6
	7	6	...	β Ceti	34	44	17

During these observations the comet was very indistinct.

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1845MNRAS...7...21.

Jan. 11; bar. 29in·97; therm. 82°.

For Colombo Mean Time.

	h m		° ′ ″
At	7 5	Distance from β Ceti	29 27 55
	7 9	... Fomalhaut ...	14 8 18
	7 13	... α Eridani......	25 20 1
	7 15	... β Ceti	29 28 8
	7 18	... Fomalhaut ...	14 9 5
	7 23	... α Eridani......	25 17 40
	7 26	... α Arietis	75 36 20
	7 29	... Rigel	82 13 3
	7 34	... α Eridani......	25 16 10

These coincidences were extremely difficult to obtain satisfactorily.

Longitude of place, 5h 9m 12s East.

V. A communication from Professor Schumacher, containing an observation of Biela's Comet, made at Berlin by Professor Encke.

The comet was seen on Nov. 29, with great difficulty, with the large refractor of 9 French inches aperture.

At 7h 0m Berlin Mean Time, R. A. = 337° 2′ 50″·1;
Declination = + 3° 31′ 24″·2.

VI. An extract of a letter from Professor Challis to the President, containing two observed places of Biela's Comet.

	Green. M. T.	R. A. of Comet.	N. P. D. of Comet.
	h m s	h m s	° ′ ″
Dec. 1	6 58 0	22 30 7·80	86 46 35·1
3	8 9 42	22 32 21·22	87 4 1·7

By comparison of the above places with Mr. Hind's Ephemeris, the error of the Ephemeris appears to be 21s in defect in R. A. and 67″ in excess in N. P. D. The comet was readily found with the Northumberland telescope, though it is an extremely faint object, and only just within the power of so large an instrument; it is apparently round, without any marked condensation of light, and its apparent diameter is about 1′½.

VII. On the Comet of 1585, discovered by Rothmann. By J. R. Hind, Esq. Communicated by G. Bishop, Esq.

"In the present notice it is merely intended to give the results of a first approximation to the elliptical elements of this remarkable comet. MM. Laugier and Mauvais have published an ellipse of short period, which they deduced from one of Rothmann's observations and two of Tycho's, assuming the positions given by those astronomers. In my investigation I have rigorously calculated all the observations, and employed those of Oct. 19, Nov. 1, and Nov. 17 (New Style), for an approximate orbit, with the view to the more accurate application of parallax. The discussion is not yet completed; but the following orbit, computed on Gauss's general method, sufficiently proves that it is necessary to admit a short period of revolution, in order to represent the observations of Tycho and Rothmann. The identity of this comet with De Vico's first, discovered in August 1844, is extremely probable; and it yet

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